# CLAIMS

What is claimed is:

1. An essentially dry composition comprising:
spray dried particles for delivering a therapeutic agent to the deep lung, wherein the particles comprise a therapeutic agent and at least 55% of the particles have an aerodynamic diameter less than about 4.7 μm as measured by a Mark I Anderson Impactor for 30 seconds at 28.3 l/min flow rate.

2. The composition of Claim 1, wherein the particles have a tap density less than about 0.4 g/cm$^3$.

3. The composition of Claim 1, wherein the particles have a tap density less than about 0.1 g/cm$^3$.

4. The composition of Claim 1, wherein the particles have a mass mean diameter between 5 μm and 30 μm.

5. The composition of Claim 1, wherein the particles further comprise a pharmaceutically acceptable excipient.

6. The composition of Claim 5, wherein the pharmaceutically acceptable excipient is selected from the group consisting of organic compounds, inorganic compounds, surfactants and any combinations thereof.

7. The composition of Claim 6, wherein the pharmaceutically acceptable excipient is a surfactant.

8. The composition of Claim 1, wherein the agent is selected from the group consisting of proteins, peptides, polysaccharides, lipids, nucleic acids and combinations thereof.

9. The composition of Claim 1, wherein the agent is selected from the group consisting of antibodies, antigens, antibiotics, antivirals, hormones, vasoactive agents, neuroactive agents, anticoagulants, immunomodulating agents, cytotoxic agents, ribozymes, antisense agents and genes.

10. The composition of Claim 1, for use in local inhalation therapy.

11. The composition of Claim 10, wherein the agent is an agent for the treatment of asthma, emphysema, or cystic fibrosis.

12. The composition of Claim 1, for use in systemic inhalation therapy.

13. The composition of Claim 12, wherein the agent is insulin.

14. A method of delivering an essentially dry composition to the deep lung of the pulmonary system comprising: administering to the respiratory tract an effective amount of an essentially dry composition comprising spray dried particles for delivering a therapeutic agent;

wherein the particles comprise a therapeutic agent and at least 55% of the particles have an aerodynamic diameter less than about 4.7 μm as measured by a Mark I Anderson Impactor for 30 seconds at 28.3 l/min flow rate.

15. The method of Claim 14, wherein the particles have a tap density less than about 0.4 g/cm$^3$.

16. The method of Claim 14, wherein the particles have a tap density less than about 0.1 g/cm$^3$.

17. The method of Claim 14, wherein the particles have a mass mean diameter between 5 μm and 30 μm.

18. The method of Claim 14, wherein the particles further comprise a pharmaceutically acceptable excipient.

19. The method of Claim 18, wherein the pharmaceutically acceptable excipient is selected from the group consisting of organic compounds, inorganic compounds, surfactants and any combinations thereof.

20. The method of Claim 19, wherein the pharmaceutically acceptable excipient is a surfactant.

21. The method of Claim 14, wherein the agent is selected from the group consisting of proteins, peptides, polysaccharides, lipids, nucleic acids and combinations thereof.

22. The method of Claim 14, wherein the agent is selected from the group consisting of antibodies, antigens, antibiotics, antivirals, hormones, vasoactive agents, neuroactive agents, anticoagulants, immunomodulating agents, cytotoxic agents, ribozymes, antisense agents and genes.

23. The method of Claim 14, for use in local inhalation therapy.

24. The method of Claim 23, wherein the agent is an agent for the treatment of asthma, emphysema, or cystic fibrosis.

25. The method of Claim 14, for use systemic inhalation therapy.

26. The method of Claim 25, wherein the agent is insulin.

27. The method of Claim 14, wherein delivery is by dry powder inhaler.